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LEVELnews

Great Lakes — St. Lawrence River Water Levels

All lakes above average levels at end of summer

All of the Great Lake levels remain above average, with the August monthly mean levels ranging from 2 cm to 46 cm above their period-of-record monthly averages (1918–2017), and beginning-of-September levels ranging from 1 cm to 45 cm above their period-of-record averages. However the beginning-of-September levels for all the Great Lakes were at the same level or below those seen at the same time in 2017. The water levels in the lower St. Lawrence River were near or above average due to continued above average outflow from Lake Ontario and varied outflow from the Ottawa River.

August monthly lake levels

All the Great Lakes had above average monthly mean water levels in August. Lake Erie continued to be well above average and the highest above average of the Great Lakes, Lake Ontario continued to be the closest to average for the month of August. Lake Superior was 11 cm above its period-of-record (1918–2017) August monthly mean water level and 13 cm below its value in August 2018. Lake Michigan–Huron's monthly mean level in August was 39 cm above average and 5 cm lower than last August's level. Lake Erie's monthly mean level was 46 cm above average, but just 2 cm above the level of the previous August, and the highest it has been for the month of August since 1997. Lake Ontario's August monthly mean level was 2 cm above average but 52 cm lower than August 2017.

Lake level changes

Mixed water supplies across the Great Lakes for August

Great Lakes Water Level Information

Lake	August 2018 Monthly Mean Level		Beginning-of-September 2018 Level	
	Compared to Monthly Average (1918–2017)	Compared to One Year Ago	Compared to Beginning-of-Month Average (1918–2017)	Compared to One Year Ago
Superior	11 cm above	13 cm below	12 cm above	13 cm below
Michigan–Huron	39 cm above	5 cm below	43 cm above	Same
St. Clair	48 cm above	2 cm below	52 cm above	6 cm below
Erie	46 cm above	2 cm above	45 cm above	2 cm below
Ontario	2 cm above	52 cm below	1 cm above	40 cm below

Canada

combined with continued above average outflows resulting in varied water level changes over the month of August. Lake Superior levels remained stable through August, due to the combination of above average outflows and average water supplies, when on average (1918–2017) it rises 1 cm. Lake Michigan–Huron experienced above average water supplies that were not completely offset by the above average outflows for the month, resulting in its level remaining stable over August when on average it falls by 4 cm. Lake Erie's level fell slightly more than average, falling 9 cm when its average fall is 8 cm during the month. Above average water supplies to Lake Ontario continued to be offset by above average outflows resulting in its level falling 15 cm, slightly more than its average fall of 14 cm.

Beginning-of-September lake levels

All the Great Lakes beginning-of-September levels were above average but the same or below those seen at the beginning of September 2017. Lake Superior's beginning-of-September level was 12 cm above average (1918–2017), but 13 cm below the level at the same time in 2017. Lake Michigan–Huron's beginning-of-September level was 43 cm above average and the same level as last year. Lake Erie was 45 cm above average at the beginning of September but 2 cm lower than the same time last year. Lake Ontario's level at the start of September was only 1 cm above average and 40 cm lower than the water levels last year. At the beginning of September, all of the lakes were at least 46 cm above their chart datum level.

Water levels forecast

Relative to their beginning-of-September levels and assuming average water supply, Lake Superior levels are expected to remain steady through the month of September while all the other Great Lakes are expected to continue their seasonal declines. For a graphical representation of recent and forecasted water levels on the Great Lakes, refer to the Canadian Hydrographic Service's monthly water levels bulletin at: http://tides-marees.gc.ca/C&A/bulletin-eng.html.

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August Precipitation over the Great Lakes[1,2]

Great Lakes Basin	118%	Lake Erie (including Lake St. Clair)	112%
Lake Superior	88%		
Lake Michigan–Huron	136%	Lake Ontario	120%

August Outflows from the Great Lakes[1]

Lake Superior	117%	Lake Erie	117%
Lake Michigan–Huron	107%	Lake Ontario	116%

[1] As a percentage of the long-term August average.
[2] US Army Corps of Engineers
NOTE: These figures are preliminary.